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“The 1st edition of the 1:2500 in Glamorganshire
and Monmouthshire”

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The 1st edition of the 1:2500 in Glamorganshire and Monmouthshire

R C Wheeler

In *Sheetlines* 121, I presented an analysis of a large sample of 1st-edition 25-inch sheets of Suffolk, greatly aided by information on a collection of ordinary sales copies: the picture one obtains from just looking at copyright-deposit copies and Record Maps from the end of the edition's life can be deficient. I thought it likely that most of the conclusions were applicable to other counties being worked on at the same time, but I was aware that differences do sometimes occur across county boundaries so was reluctant to proclaim the universal applicability of any conclusions. I have recently had the opportunity to examine a couple of dozen sheets bought by South Wales water undertakings in the years around 1890 and these offered an opportunity to test the applicability of my Suffolk conclusions.

Gratifyingly, the appendices on changes to marginalia from 1884 and on the 'Coloured' stamps¹ are confirmed, although the dates of the S Wales specimens mean that the changes of the mid-1890s were not tested. One of the statements can be tightened up: I had stated that the change of county name and 'sheet' to capitals occurred 'by 1892'. Glamorgan 12.1 provides an 1891 example.

For a greater proportion of the S Wales sheets (4 out of 25), the zinc plate was retained for re-use rather than being cleaned off after printing. Two of these were by no means urban but were in valleys where the spread of industry made for a good likelihood of future sales. Whereas in Suffolk silent reprints (sometimes recognisable by being not quite facsimiles) were being made, the S Wales specimens bore the note "Reprinted in [date]" bottom left, the dates encountered being from 1884 to 1891. This is in contrast to the "Re-zincographed & printed in [date]" applicable to those sheets where the plate had been cleaned off. Re-zincographed sheets have their marginalia updated to the current standard; reprinted sheets may or may not have updated marginalia. It is possible that sheets with updated marginalia have had an unacknowledged re-zincographing, a practice I have observed in other counties.

What makes the S Wales exercise interesting is that the publication dates extend a few years further back than the Suffolk sample. This introduces three new issues: single prices, the 'surveyed by' imprint, and old-style administrative boundaries.

Taking prices first, the stating of prices for both coloured and uncoloured sheets (even when the two prices were the same) started in 1881. Prior to that, a single price was given, being the price for coloured sheets. All the specimens in this collection were coloured. Indeed, uncoloured sheets of this era are rarely encountered. Were they even available except by special arrangement? There seems to have been a general re-pricing in the 1870s,

¹ *Sheetlines* 121, 28.

which may be associated with the abandonment of publication by parishes. Prior to this, almost all sheets were priced at 2s 6d, only the urban areas, where hand-colouring will have added considerably to the cost, were more expensive.² The purchaser lost out if the sheet he needed was at the edge of the parish and was mostly blank; on the other hand, the hand-colouring in rural areas was thrown in for free. After the change, he could expect the full 1½ sq miles of mapping, but had to pay extra for the hand-colouring except on sheets that were almost unpopulated. I would encourage any reader with an uncoloured specimen printed before 1881 to tell me what price it bears.

Next, the imprint borne on these sheets before 1880 was “Surveyed 187x by [name]. Levelled by [name]. The altitudes ... &c / Zincographed under the superintendence of Lt Col Parsons, RE, FRS, at ... Major General J Cameron, RE, CB, FRS.” Inconveniently, there is no publication date. If the sheet was subsequently re-zincographed that will give us a publication date - how reliable a date is not known; but even where such a re-zincographed version exists it may be difficult to track down. One can narrow the range from other details: Cameron was Director from Aug 1875 to his death at the end of June 1878, but he was promoted Lieutenant General on 1 Oct 1877. His FRS and CB are no help, predating his appointment; and poor Parsons received no advancement at all during the decade. Nevertheless, Aug 1875 to Sep 1877 is a useful result. No doubt there are other sheets with an imprint post-dating Cameron’s promotion, or post-dating his death.³

The third difference from Suffolk concerns administrative boundaries. Suffolk had been started (so far as its new meridian was concerned) after the policy change in 1879, so showed ‘new-style’ boundaries: basically civil parishes. Both Glamorganshire and Monmouthshire had been started before 1879 and continued to show ‘old-style’ boundaries: hundreds, ancient (ecclesiastical) parishes, and townships. It was not practicable to change the set of boundaries part-way across the county.

Actually, the difference was not as striking as this general description would suggest, because both counties had a lot of parishes which were single townships.⁴ Moreover, each hundred name appears just once on the maps in

2 This is apparent from the index diagrams on the old-style Books of Reference available on the NLS website: for example Peterhead (1869).

3 Richard Oliver observed that marginalia were not always updated immediately: there is a printing of New Series sheet 286 with a publication date of July 1878 which still bears his name. So perhaps the date range above should have read Aug 1875 to Oct 1877.

4 The Historic Boundaries of Wales project has stated that township boundaries ceased to be surveyed after 1872 and has suggested that this is the cause of the patchy coverage of Glamorgan townships. But townships that were autonomous units for Poor Law purposes - which seems to have been usual in Glamorgan - became civil parishes and were shown on the 2nd edition; and comparison of editions in a sample area seems to indicate that parishes that are shown on the 1st edition without townships were indeed undivided parishes.

about the middle of the hundred and each parish name just once about the middle of the parish.⁵ Consequently the big administrative names that are such a distinctive feature of the old-style maps appear on quite a small proportion of the sheets. Often, the most practical test for whether a sheet is old-style or not is to look for a hundred name in the margin.

Why is such a test necessary if the whole of a county was either old-style or new-style? Because at some date which seems to be about 1890, the embarrassment of the Survey that its maps were still showing units of no administrative significance overcame its desire for uniformity, and when sheets were re-zincographed, hundreds and ancient parishes might be left off. The only example of this in the collection examined was of 1892 and it was easier to demonstrate the phenomenon using a pair of specimens on the NLS website. The older one has a parish name and the hundred name on the sheet; the newer omits both.

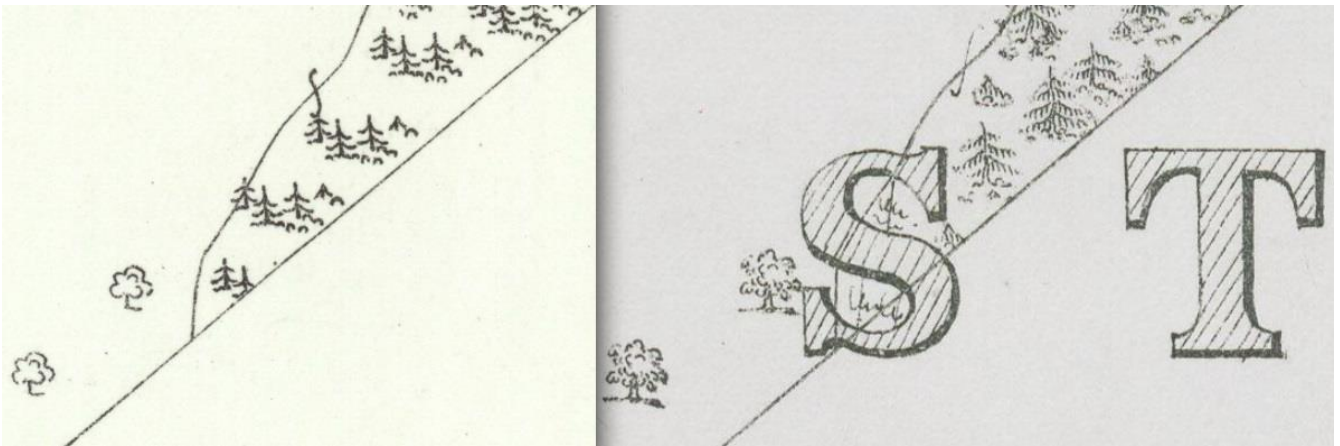


Figure 1. Wiltshire 11.2: as first produced on the right; as reprinted 1894 on the left. [Courtesy of NLS]

The extract at *Figure 1* shows just two letters from the hundred name, one impinging on a small wood. Despite the very prominent name in the older version one can follow the line of the edge of the wood: it has a sharp corner where it emerges from the middle of the 'S' and continues due south. The newer version has a more rounded corner and south of it is aligned a little west of south. The quality of the tracing on re-zincographed sheets seems to deteriorate in the 1890s, and I suspect the older version is more accurate, even though both tracings will have been made from the same fair drawing. The 6-inch map seems to confirm my belief although, being engraved, may be subject to errors of its own.

⁵ This aspect of the specification suggests that the Survey was still anticipating that purchasers might want to mount all the sheets for a parish as a giant wall-map. Mounting all the sheets of a hundred together would seem a prodigious undertaking but the practice may have been motivated with the six-inch in mind, produced from 1880 by photographic reduction of the 25-inch - albeit with a certain amount of deletion and re-drawing.

This naturally leads on to some consideration of the *content* of the S Wales sheets. The instructions for surveyors applied of course across the whole country, but what they encountered on the ground might lead to local guidance being given by Divisional officers which might not be the same everywhere. Spoil disposal at many pits took the form of plateaux rather than heaps. *Figure 2* shows a couple of examples. The whole of each plateau is covered by a number of parallel tramlines so that spoil can be dumped and spread out to either side. In due course it must have become necessary to shift the rails to a raised part and fill in the cuttings where they had been. By the 20th century, I suspect these tramway lines might have been categorised as ‘temporary’ and omitted from the map.

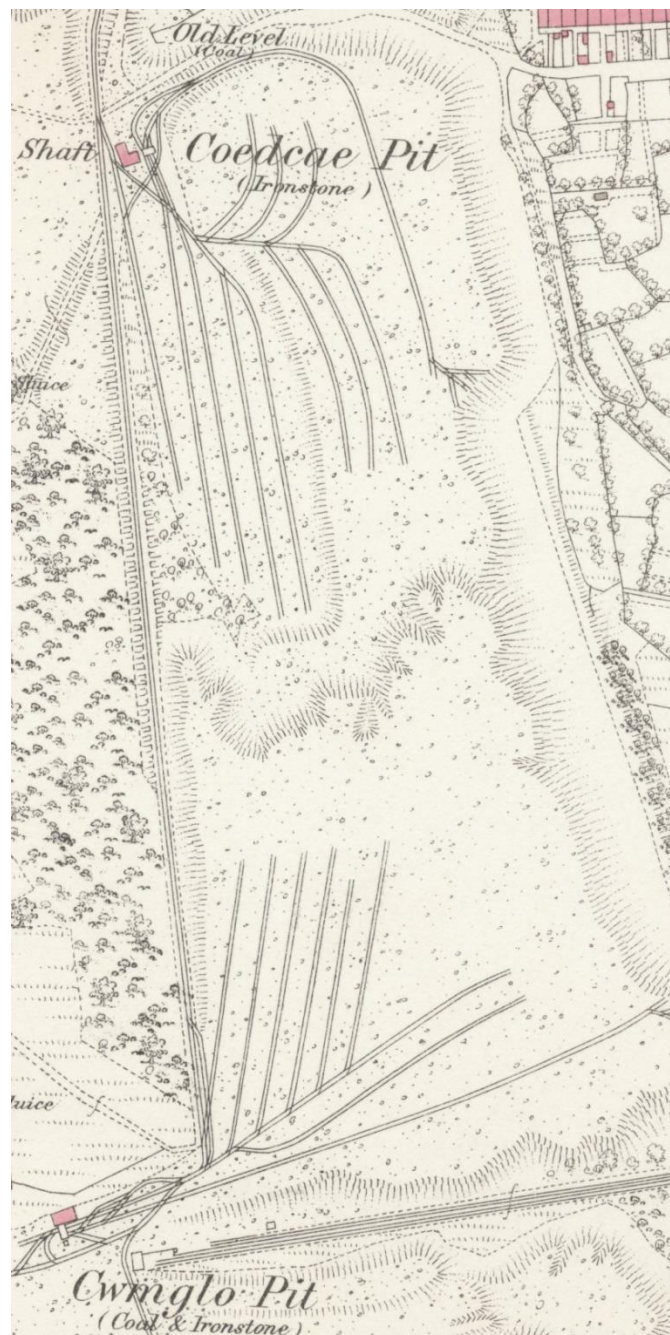


Figure 2. Spoil disposal on Glamorgan 12.5

Figure 3 shows another tramway at an ironworks. The spacing of the rails indicates it is narrow-gauge, though measurement suggests a gauge in excess of 3 ft, which seems unlikely. The contents of the tramway wagons are being tipped into standard-gauge wagons using this complex fan of tracks. It is not easy to see how it all worked. Fortunately it comes within the area of the Merthyr Tydfil 1:500. The 25-inch will have been litho-traced from a reduction of the 1:500 and one can see from Figure 4 how a certain amount of simplification was built into the process: south of the smithy the 1:500 has

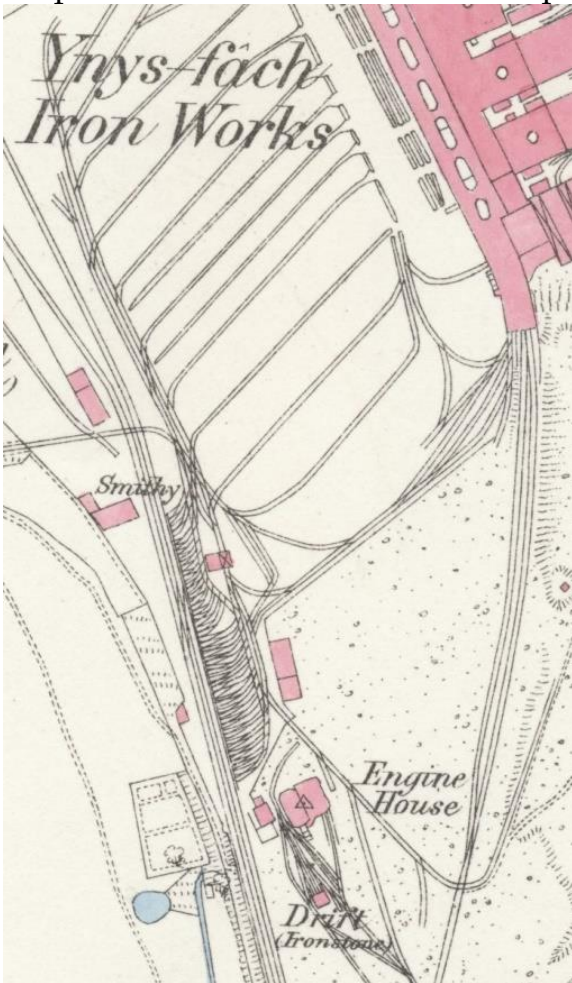
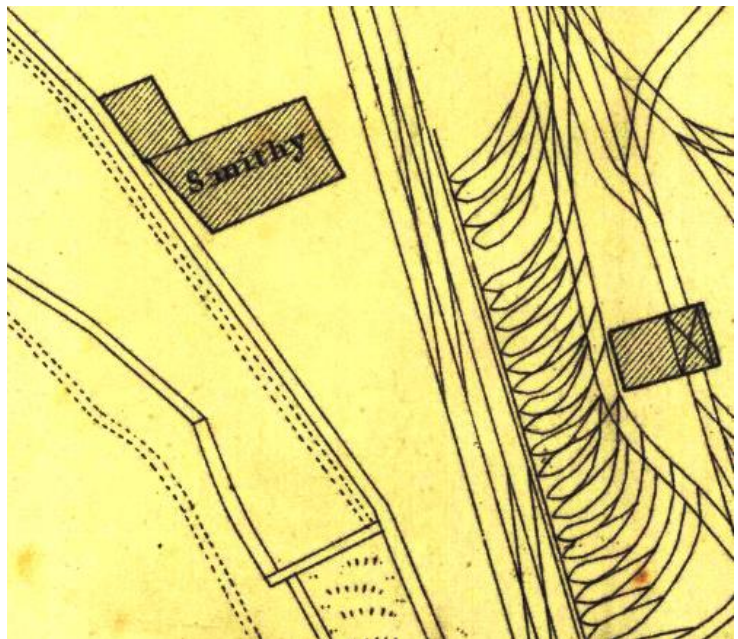


Figure 3 (left). Tipping arrangements on Glamorgan 12.5

Figure 4 (below). An extract from the corresponding 1:500 - Glam 12.5.2. [Courtesy of NLS]



two lines for a wall and two lines for a road; the tracer has simplified this to one line for the wall and one broken line for the far side of the road. Less creditably, the tracer has omitted the standard-gauge crossover next to the smithy, while retaining the one further south. Turning to the tipping arrangements shown on the 1:500, these are consistent but highly singular. Each diverging track leads to a pair of mouchette shapes which share a common line for about eight feet. One can picture what would happen in a dreamlike way. The horse pulls the tramway wagon round the loop. In the process, the right hand wheels move ahead of the left-hand wheel; the wagon pirouettes, discharging its load into the truck below; and it continues with the right-hand wheel now on the left-hand rail and vice-versa. But this can

scarcely work with more than one axle, so are these single-axle trucks, like a farm cart?

Whatever the draughtsman was trying to depict at 1:500, the tracer was utterly baffled: the 25-inch merely shows a Y-shaped divergence. And none of this reaches the six-inch at all: the detail is just too fine. The unfortunate consequence is that anyone relying on the six-inch has no idea that anything is being transferred from tramway wagons to the standard-gauge line at this point.

Let us move - sadly, perhaps - from pirouetting carts to the accuracy of hand-colouring. It seems likely that, for rural areas at least, each time a batch of a particular sheet needed to be coloured, a *model* was prepared by reference to the fair drawing and carefully checked; and then the colourists would do a series of smaller batches, limited by the amount of working space where maps could be spread out. Let us focus on the boy - for this was low-grade work - doing carmine. He looks at a small area of the model - a street, perhaps, or a farm with its sundry outbuildings. He notes which buildings he needs to colour. He then applies colour to those, doing in turn all the copies spread out. He then goes back to the model and takes the next small area, and so forth until the whole area of the model is covered. If he mis-remembers which buildings are to be coloured, this mistake is liable to be made on every sheet in the small batch. It follows that if we want to measure reliability in colouring, we should not compare two specimens from the same batch, because they might well exhibit the same error. In contrast, two specimens from different batches - i.e. done in different months - should provide a reliable test.

Conveniently, the S Wales collection included three pairs of duplicate sheets, and in each case the colouring had been done at different dates. Two of the pairs exhibited a couple of discrepancies. An example is shown in *Figure 5*, where (5b) is from a re-zincographing. Note the different styles of tree stamps used. Note the change in proportions of the SW outbuilding of Aber-nant-clydwaun; that was the sort of thing that tracers were particularly liable to distort. But the real purpose of the comparison is the building in parcel 802, coloured in (5a), uncoloured in (5b). *Figure 6* shows a different sort of error. A little NW of '576' are two small buildings - perhaps for animals - each with an adjacent pen. In (6a) the buildings lie south of the pens, in (6b) north of the pens.

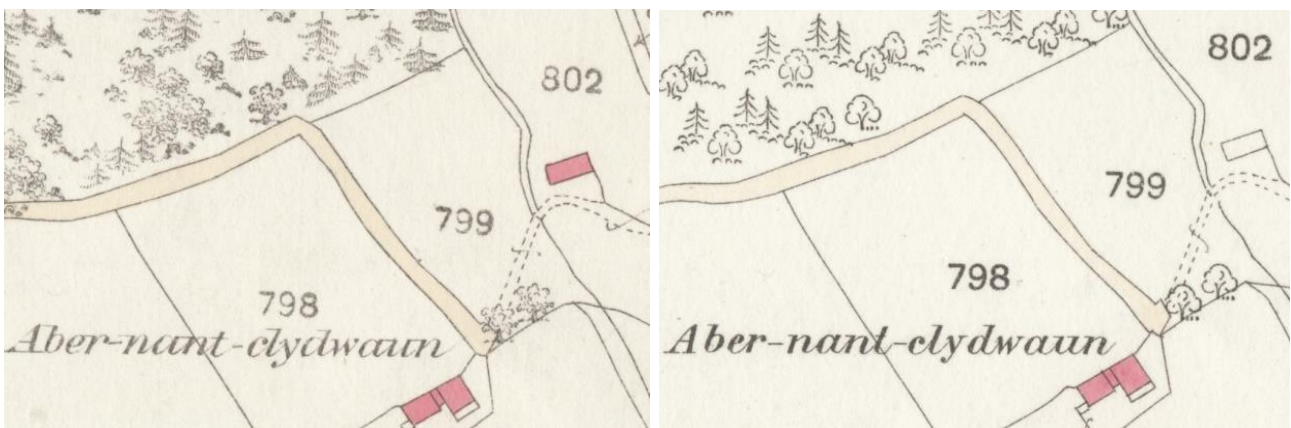


Figure 5. Two states of Glamorgan 34.8

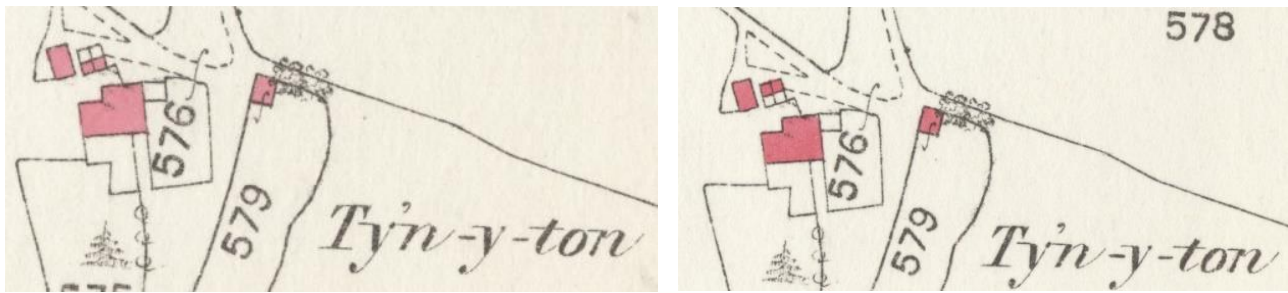


Figure 6. Glamorgan 34.4: specimens from two colouring batches of the initial zincograph.

The sheets in question are quite rural, each having about 50 buildings - defined as a carmine-tinted structure, possibly with internal divisions. Thus we seem to have an error rate of some 1 or 2 percent. This is low enough for users to proceed on the assumption that colouring is correct, unless they have reason for believing the contrary, in which case they should find another specimen, preferably with a different colouring date, as a check.

Finally, how should one describe one of these sheets? Because these S Wales sheets seem to be described completely by the marginalia, it seems that, apart from the sheet number, just five dates are needed - many of which will have blank entries:

- a. date of publication (and first zincographing)
- b. date of re-zincographing
- c. date of reprinting
- d. date of helio or other photographic reproduction, and
- e. date of colouring.

(c) will normally only apply to sheets where the zinc plate was retained, so will only be found in conjunction with (b) in cases (if there are any) where an initial decision not to retain the plate was reversed after a subsequent zincographing. (d) is inapplicable for all the sheets in the collection examined but almost certainly occurred later on. With (e) it will be necessary to distinguish between a blank because the sheet is uncoloured and a blank from the period when stamping of coloured maps was suspended, about Oct 82 to Sep 83.

Such a scheme is likely to be quite generally applicable to 25-inch sheets from 1875 onwards, with the caveat that it may not capture all the characteristics of a map. *Figure 1* provides a good example. The later specimen offers us a publication date and a reprint date (1894), but it is quite evident that it has been re-zincographed. So do we have a change of terminology so that what in earlier years would be described as 're-zincographed & printed' is now just 'reprinted'? Or was there an intermediate zincographing whose plate was retained and reprinted in 1894? I am inclined to suppose the former, having observed that in Leicestershire the tree stamps we see in *Figure 1* only appeared in 1894. But this is less than absolute proof: I am conscious that changes in tree stamps did not take place simultaneously across the country.